

ABSTRACT

The present invention relates to a cell that expresses a gene encoding a ligand responsive transcriptional regulatory factor and that comprises the following genes (a) and (b) introduced to the chromosomes thereof:

(a) a reporter gene ligated downstream of a recognition sequence for the ligand responsive transcriptional regulatory factor and a nucleotide sequence necessary for the initiation of transcription; and

(b) a reporter gene that encodes a protein distinguishable from a protein encoded by the above reporter gene and that is ligated downstream of a promoter making no change of transcriptional activity from a ligand contact with the ligand responsive transcriptional regulatory factor, *etc.* According to the present invention, it becomes possible to more conveniently and accurately measure the activity of a test substance against the ability of a ligand responsive transcriptional regulatory factor to promote transcription.